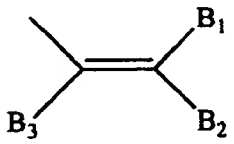
Amendments to Claims

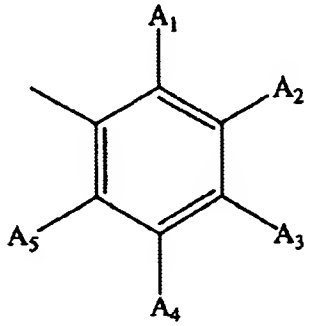
Cancel Claim 1.

2. (Currently amended) The lactone of Claim ~~1~~ 14 wherein when Y is alkenyl, the alkenyl group is defined as



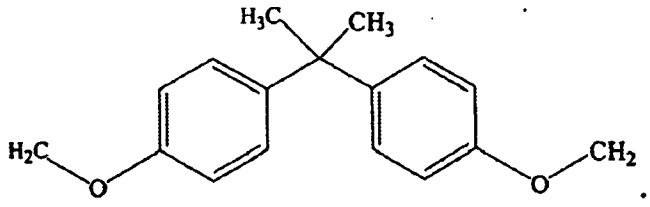
wherein B_1, B_2, and B_3 are individually a substituent group X as defined in Claim 1.

3. (Currently amended) A lactone of Claim ~~1~~ 14 wherein when Y is phenyl, **the phenyl group is defined as**



wherein A_1, A_2, A_3, A_4, and A_5 are each independently a substituent group X as defined in Claim 1.

4. (Currently amended) A composition of Claim ~~1~~ 14 wherein the L substituent having two functional groups is



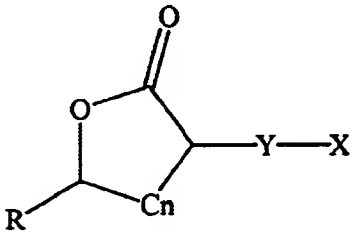
5. (Currently amended) A composition of Claim ~~1~~ 14 wherein the L substituent having two functional groups is

6. (Currently amended) A composition of Claim ~~1~~ 14 wherein X is selected from the group consisting of and identified with the numbers 2, 5, 15, 28, 30, 32, 33, 34, 35, 37, 40, 43, 45, 47, 48, 49, 58, 62, 70, 74, 75, 76, 77, 78, 80, 84, 85, 90, 93, 94. 95, 97, 98, 99. 100, 101, 102, 103, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 122, 125, 127, 128, 133, 139, 141, 142, 143, 144, 148, 150, 151, 153, 156, 160, 161, 162, 163, 165, 166, 167, 168, 169, 175, 177, 178, 179, 185, 186, 187, 188, 189, 191, 192, 193, 194, 195, 197, 198, 199. 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 219, 221, 222, 223, 224, 225, 231, 232, 233, 234, 238, 239, 240, 241, 242, 243, 244, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 283, 284, 285, 286, 288, 289, 291, 292, 293, 294, 295, 297, 298, 300, 301, 302, 303, 304, 305, 306, 307, 308, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529 and 530 in Table 1.

7. (Currently amended) A composition of Claim ~~1~~ 14 wherein X is selected from the group consisting of and identified with the numbers 2, 5, 15, 28, 32, 33, 40, 45, 49, 70, 75, 76, 78, 80, 84, 85, 90, 93, 99, 100, 101, 102, 103, 111, 117, 118, 119, 120, 122, 125, 127, 128, 133, 139, 141, 142, 143, 144, 148, 150, 151, 153, 156, 160, 161, 162, 165, 166, 167, 168, 169, 175, 177, 178, 179, 185, 186, 187, 188, 189, 191, 192, 193, 194, 194, 198, 199, 200, 201, 202, 203, 207, 210, 211, 212, 213, 214, 215, 216, 217, 219, 221, 222, 223, 224, 225, 231, 232, 233, 234, 238, 239, 240, 241, 250, 251, 252, 253, 254, 267, 270, 271, 272, 273, 275, 276, 277, 278, 279, 285, 291, 292, 293, 294, 295, 297, 298, 300, 303, 317, 318, 323, 325, 332, 333, 334, 335,

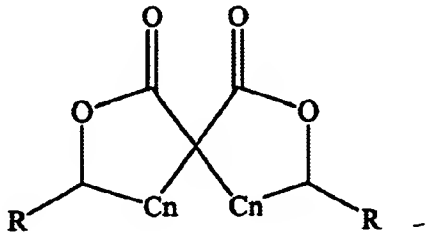
336, 337, 345, 378, 379, 380, 384, 388, 395, 396, 403, 404, 405, 406, 407, 408, 409, 410, 411, 416, 417, 420, 424, 425, 433, 448, 449, 450, 453, 458, 460, 474, 475 and 512 in Table 1.

8. (Previously amended) A process comprising: contacting lactones of structure B with an amine to form a hydroxy amide, wherein each Y is present independently as alkyl, alkenyl, alkynyl, aryl, or a direct bond to X; each X is independently a substituent having a field effect, F, between –0.42 and +1.58; wherein R is a branched or straight chain alkyl group of C_1 to C_{10}, or an aryl group; and wherein each n is independently 1 to 3



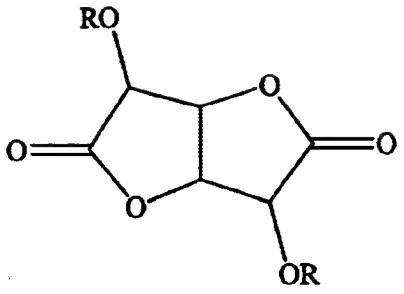
"B"

9. (Original) A process comprising: contacting a spiro-bislactone of structure A, wherein each n = 1 to 3 independently and R is a branched or straight chain alkyl group of C_1 to C_{10}, or an aryl group; and wherein each n is independently 1 to 3; with an amine to form a hydroxy amide



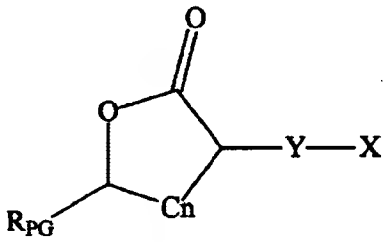
"A"

10. (Original) A process comprising: contacting a bicyclo-lactone of structure C wherein R is a branched or straight chain alkyl group of C_1 to C_{10}, or an aryl group, or C(O)OE wherein E is independently alkyl or aryl, with a amine



"C"

11. (Previously amended) A process comprising: contacting a polymer containing one or more lactone groups prepared from at least one lactone monomer of structure D with an amine to form a hydroxy amide, wherein each Y is present independently as alkyl, alkenyl, alkynyl, aryl, or a direct bond to X; each X is independently a substituent having a field effect, F, between –0.42 and +1.58; wherein R_{PG} is a radically polymerizable substituent group selected from the group consisting of styrene, acrylate, methacrylate, acrylamide, and methacrylamide; and wherein each n is independently 1 to 3



"D"

12. (Original) A process, comprising:
    (i) performing the steps of any one of the Claims 8, 9, 10 or 11;
    (ii) applying a product resulting from step (i) to an object surface.

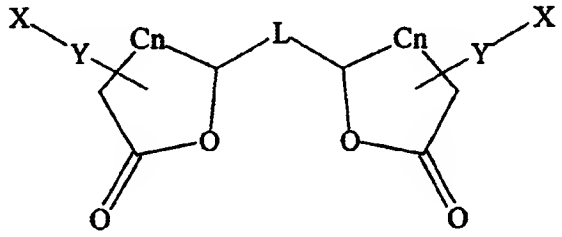
13. (Original) An article treated by the process of Claim 12.

14. (Previously amended) A lactone composition having the structural formula I, wherein each n is independently 1 to 3;

L is either present as a substituent having two functional groups, or is a direct bond forming a spiro-bislactone, or is H wherein rings of the structure I are not connected, or is a radically polymerizable group wherein the rings of the structure I are not connected;

wherein Y is either present independently as alkyl, alkenyl, alkynyl, or aryl or is a direct bond;

each X is independently a substituent having a field effect, F, between –0.42 and +1.58



I

wherein said lactone is employed as a cross-linking agent in a coating composition containing amine compound(s) that are reactive with lactone groups.